

### Abstract of the Disclosure

5 Provided is a laser diode wherein a buried layer covers a ridge structure on an upper cladding layer, and a protective layer having an adhesive property to the buried layer and a thermal conductivity higher than that of the buried layer is formed on the buried layer. The portions of the buried layer and the protective layer corresponding to the top of the ridge are opened so that an upper electrode contacts a semiconductor material layer formed on the ridge through the opened portions of the buried layer and the protective layer.